

SOLAR InCellPlate

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Electrochemical deposition by inline plating

Innovative single side solar cell metallisation: a cost effective, high volume production platform using a patented inline plating method. Optimised liquid flow and light sources ensure a homogeneous high speed metal deposition of Ag on Ag paste and Ni/Ag on Si.

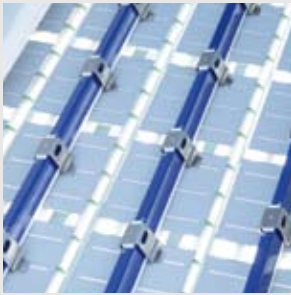
Areas of application

- LIP - Light Induced Plating, -etching and rinsing of solar cells
- Single side processing - no backside protection required
- Ag plating on fine line printed Ag Paste
- Ni/Ag plating for direct metallisation on selective emitter structures

Features and benefits

- Single side inline plating
- High uptime due to dry soft touch backside contacting
- Low contact finger broadening
- Efficiency increase up to 0.4% for Ag on Ag Paste
- Efficiency increase of ~1% for Ni/Ag on selective emitter structures
- Modular production system - customised for your application
- Environmental enclosure and bi-directional exhaust system - for staff safety and best product quality
- Ergonomic design - for easy operator handling and maintenance
- Self-explanatory recipe and process control - easy to create, change and check on the monitor

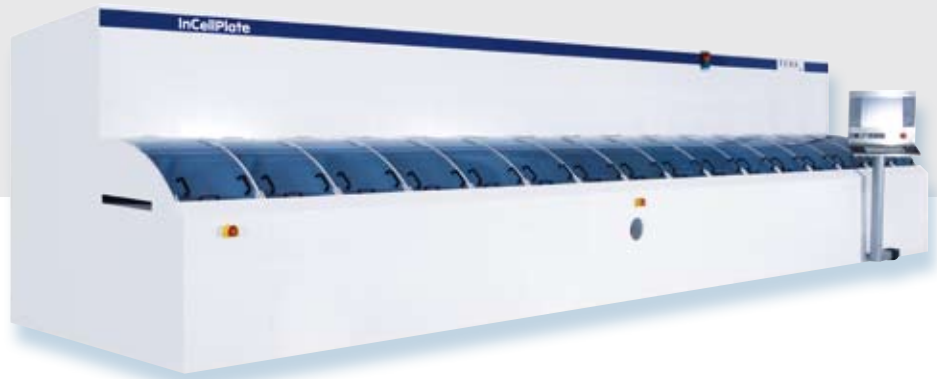




Inline plating



Dry contacting



Front view InCellPlate

Technical Data InCellPlate

Process	<ul style="list-style-type: none"> • Dry loading • Electrochemical deposition of Ni and Ag metal • Cascade rinsing • RENA AirChannelDryer technology • Dry unloading
Dimensions	6000 - 18600 x 2150 x 2350 mm (length x width x height)
Throughput	gross throughput up to 2400 wafers/h depending on process parameter
Wafer thickness	> 150 µm
Media consumption	<ul style="list-style-type: none"> • DI water 150 - 350 l/h • Compressed air for drying 10 - 20 Nm³/h • Exhaust 2000 - 7000 m³/h • Electricity 230/400 V, 50 Hz, 60 - 200 kW